

# **Appendix – Transportation Report – Green Horse Project Area**

## *Introduction*

This report describes the existing and proposed transportation system of the Green Horse EA Project Proposed Action. The project is located in Idaho County approximately 10 miles north-northeast of Elk City, Idaho and encompasses about 9,500 acres within National Forest System lands Township 31 North, Range 8 East, Sections 4, 9-16, 20-29, 35, and 36; T. 31 N., R. 9 E., Sections 7, 8, 19-20, 28, 33 in the O'Hara Creek, Glover Creek-Selway River, Horse Creek, and Upper American River watersheds that drain into the Selway River or South Fork Clearwater River. The main collector roads to the project area are Forest Road 443 via State Road US14 from the south and Forest Road 464 from the west of the project area. The Green Horse EA Project Area presents an opportunity to review 53 miles of existing National Forest System roads to update Road Maintenance Objectives. Road work activities would include maintenance/reconditioning and reconstruction of haul roads, with work items such as adding or replacing culverts, road realignment, template shaping, slump removal, roadway stabilization, brushing, and blading.

## *Overview of Issues Addressed*

The road system within the Green Horse EA project area includes inventoried National Forest System Roads. The road system serves a broad range of uses, from recreational activities like hunting, berry picking, firewood cutting, and sightseeing, to commercial and administrative needs such as vegetation management and fire suppression. The majority of public comments and concerns about roads in the project area stem from impacts to these uses, related to access and road characteristic changes, and the impacts of roads on other resources. In addition to road conditions, data collected from field surveys include documentation of any existing access control issues or breach of unauthorized motorized use. If any exist, strategies to mitigate against unauthorized motorized access and use will be recommended as part of the overall project.

## **Issue Indicators**

Road management incorporates the following three key elements: Operation Maintenance Level (OPML), Objective Maintenance Level (OBML), and Access Travel Management (ATM) Strategy. Each road segment is assigned all three elements. These elements combine to describe and document the intended purpose of an individual road or Road Management Objectives (RMO) in providing access to implement projects within the project area. A number of characteristics could be used to describe a road, such as width, grade, surface type, sign distance, design speed, design vehicle, etc. The maintenance level of a road indicates its expected service level and its maintenance requirements. The maintenance level must be consistent with road management objectives (RMO) and maintenance criteria (FSH 7709.59).

Road access is regulated by the landowner or other legally granted authority. Where the Forest Service has this authority, or jurisdiction, a motorized access prescription or Access Travel Management (ATM) defines the access allowance based on vehicle type and time of year for use.

## *Affected Environment*

### **Existing Condition**

The Green Horse EA project area has 53 miles of Nez-Perce Clearwater National Forest System Roads. US 14 runs to the southwest of the project area and will be the main arterial into the project area. Road 443 serves as the collector road accessing the project from Elk City and the 464 serves as an alternate collector road from the West. Local roads maintained for passenger and high clearance vehicles are distributed throughout the project area.

## Desired Condition

The majority of the treatment stands would be accessed for harvest using the existing transportation system with temporary roads. Maintenance/reconditioning and reconstruction on existing system roads will be necessary. Temporary roads constructed to facilitate vegetation treatments will be recontoured after the project is completed. Maintenance Level 1 Roads in storage reconstructed as haul routes during the project will again be closed and stored after completion of treatment activities. Road maintenance activities will be performed along the haul route, and reconstruction activities may include culvert replacements, spot rock replacements, brushing, and reshaping drainage dips. Access mitigation measures will be prescribed to limit unauthorized access during and after project activities.

## *Environmental Consequences*

### Methodology

### Past, Present, and Foreseeable Activities Relevant to Cumulative Effects Analysis

The history of the major collector roads 443, 356, and 464 in the project area dates to the 1930's for timber sales. Subsequent timber activities in the 1980's resulted with further development of roads in the project area that serves as access for vegetation treatment and fire suppression activities. Current road conditions are the result of these past decisions and activities, combined with ongoing maintenance, environmental impacts, and use. Deferred maintenance is continually accruing, especially due to the reduced capacity to perform annual maintenance on Level 2 & 3 roads. Long intervals between project associated maintenance, has exacerbated the maintenance backlog. Deferred maintenance on system roads is a Forest-wide issue and will be addressed at the Forest level.

Access Prescriptions, originally determined when roads were constructed, are reviewed as needed. The Nez Perce Clearwater National Forests Travel Analysis Report – September 22, 2015 was created from the Travel Analysis Process as outlined in Chapter 20 Travel Analysis, FSH 7709.55. The report identifies opportunities and sets priorities for future National Transportation Systems. The report helps inform Forest Managers as they identify the minimum road system needed for safe and efficient travel and for the administration, utilization, and protection of National Forest System lands. The report also assesses the Benefits and Risks of the Existing Road System. This report was reviewed for the project area and considered risk factors and evaluated maintenance levels, seasonal restrictions, and the need for future administrative use. Professional judgment based on science and local knowledge of the project area were used and the project interdisciplinary team documented a project-level Travel Analysis. All project area roads are needed for future management including but not limited to providing access to manage plantations, fire suppression, and other administrative use.

### Alternative 1 – No Action Alternative

#### Direct Effects

There are no direct effects of choosing the no action alternative.

#### Indirect Effects

This alternative would take no action with regard to the National Forest transportation system within the project area. Travel management in the project area would remain the same.

## Cumulative Effects

The cumulative effect of no action would result in a transportation system that would remain static. The backlog of deferred road maintenance would not be performed as the current funding on the forest is not sufficient to address needs.

## Summary of Effects

Road improvements through proposed reconditioning and reconstruction would not be implemented. An older, dated system would remain in place, road maintenance costs would not be reduced. This alternative would continue the standard resource protection and recurrent maintenance activities such as access management and routine scheduled road maintenance that are currently ongoing in the project area.

## Alternative 2 – Proposed Action

Alternative 2 proposes to use existing roads within the project area. 20 miles of road would be reconditioned and 19 miles would be reconstructed. Temporary roads would be built to access timber units but would be recontoured after the project. Road maintenance work consists of grading roadbeds, cleaning drainage structures, cutting roadside vegetation and removing small slumps and slides. Road reconstruction work typically involves reshaping the road prism, stabilizing the road subgrade, culvert installation, road surfacing, and heavy brushing. Except for temporary roads, no existing National Forest System Roads in the project area were recommended for decommissioning. Proposed Action was expressly created based on collaboration efforts and feedback that we received from the public and other partners. No changes were proposed to the OBML and ATM of National Forest System Roads in the project area. OPML of stored ML1 roads reconstructed to haul standards will return to storage status after the completion of the project.

**Table 1. Operational Maintenance Level**

Maintenance Level			
	No Action*	Proposed*	
LEVEL 1 (STORAGE)	27.2	13.0	
LEVEL 2 (HIGH CLEARANCE)	17.6	31.8	
LEVEL 3 (1 LANE PASSENGER)	8.3	8.3	
LEVEL 4 (2 LANE AGGREGATE)	0	0	
LEVEL 5 (2 LANE PAVED)	0	0	

\*Length in miles

## Design Features and Mitigation Measures

All road activities will follow the National Best Management Practices (BMPs) for Water Quality Management on National Forest System Lands in order to avoid, minimize, or mitigate adverse effects to soil, water quality, and instream riparian resources that may result from road activities (2012 April, FS-990a. Vol 1). Surveying for project implementation may recommend certain roads to have increased drainage features and stabilization to ensure that sedimentation and erosion risks from roads are mitigated to the extent practicable. Road mitigations may include, but not limited to the addition of cross drain structures near stream crossings, application of surface aggregate gravel materials, road realignment or reshaping, and placement of roadway fill and installation of new signs or gates.

### Direct Effects

Road activities would increase during project implementation. Proposed reconstruction and road maintenance in the proposed action would address deferred maintenance items which have been accruing over time thus easing future maintenance responsibilities. Mitigation on access control will also be addressed based on the prescribed ATM.

### Indirect Effects

Reconstruction and road maintenance can protect water quality and wetlands by reducing erosion and sedimentation in areas requiring frequent or temporary access. Improved road surfacing can provide for safety, longer operating periods, lower maintenance and operating costs, and minimal impacts to forest resources.

### Cumulative Effects

A road constructed to adequate specifications and proper maintenance and reconstruction of existing roads will provide for safety, longer operating periods, and lower maintenance and operating costs in the future.

Table 2. Proposed Road Work and Access Control Mitigation

Road	BMP	Current Status	OBML	GIS_MILES	Road Work	ATM	Access Control
2116	0.432	Exist	ML-1	5.096	Reconstruct	RYA	No Issue
9704	0	Exist	ML-1	0.968	Recondition	RYA	No Issue
9708	0	Exist	ML-1	1.288	No_Haul	RYA	No Issue
9713	0	Exist	ML-1	0.657	Reconstruct	RYA	Gate/Barrier Broken
9714	0	Exist	ML-1	4.582	Reconstruct	RYA	Gate/Barrier Broken
9714	4.582	Exist	ML-1	0.933	No_Haul	RYA	Gate/Barrier Broken
9714A	0	Exist	ML-1	0.53	No_Haul	RYA	No Issue
9714B	0	Exist	ML-1	0.41	Reconstruct	RYA	No Issue
9714B1	0	Exist	ML-1	0.174631	Reconstruct	RYA	No Issue
9715A	0	Exist	ML-1	0.125	No_Haul	RYA	No Issue
9715B	0	Exist	ML-1	0.439	No_Haul	RYA	No Issue
9716A	0	Exist	ML-1	2.327	Reconstruct	RYA	No Issue
9716B	0	Exist	ML-1	2.19	No_Haul	RYA	No Issue
9716B1	0	Exist	ML-1	1.49	No_Haul	RYA	No Issue
9716D	0	Exist	ML-1	1.198	No_Haul	RYA	No Issue

9717	0	Exist	ML-1	4.297	No_Haul	RYA	No Issue
77815	0	Exist	ML-1	0.511	No_Haul	RYA	No Issue
356	1.698	Exist	ML-2	1.971	Recondition	RYA	No Issue
464A	0	Exist	ML-2	0.804	Recondition	OSA4	No Issue
2103	0	Exist	ML-2	2.599	Reconstruct	RYA	No Issue
2103	2.599	Exist	ML-2	0.706	No_Haul	RYA	No Issue
2116	0	Exist	ML-2	0.432	Recondition	OYA	No Issue
9711	0	Exist	ML-2	2.292	No_Haul	OSA4	No Issue
9715	0	Exist	ML-2	1.251	Recondition	RYA	Gate/Barrier Broken
9715	1.251	Exist	ML-2	2.119	No_Haul	RYA	Gate/Barrier Broken
9716	0	Exist	ML-2	1.842	Recondition	RYA	No Issue
9716	1.842	Exist	ML-2	3.551	Reconstruct	RYA	No Issue
356	0	Exist	ML-3	1.698	Recondition	OYA	No Issue
443	16.64	Exist	ML-3	4.446	Recondition	OYA	No Issue
464	28.021	Exist	ML-3	2.113	Recondition	OYA	No Issue
356	3.669	Decom	n/a	1.883	No_Haul	B	No Issue
464A	0.804	Decom	n/a	0.452	No_Haul	B	No Issue
464I	0	Decom	n/a	0.361	No_Haul	B	No Issue
9704	0.968	Decom	n/a	3.51	No_Haul	B	No Issue
9704A	0	Decom	n/a	0.205	No_Haul	B	No Issue
9713A	0	Decom	n/a	0.374	No_Haul	B	No Issue

ML-3 - SUITABLE FOR PASSENGER CARS  
ML-2 - HIGH CLEARANCE VEHICLES  
ML-1 - BASIC CUSTODIAL CARE (CLOSED)

## Travel Analysis Process Objective

The travel analysis is an assessment of the current and future need of National Forest System Road based on access benefits and risk to resources. The Travel Analysis is not a decision document. Specifically, once the travel analysis is completed, it will be used to provide the responsible official for the Green Horse EA Project the appropriate level of information to inform decisions relating to the administration of NFS roads and changes in travel management. Findings from the Travel Analysis may be used to provide useful information to prioritize future proposed actions that include travel management and/or transportation changes.

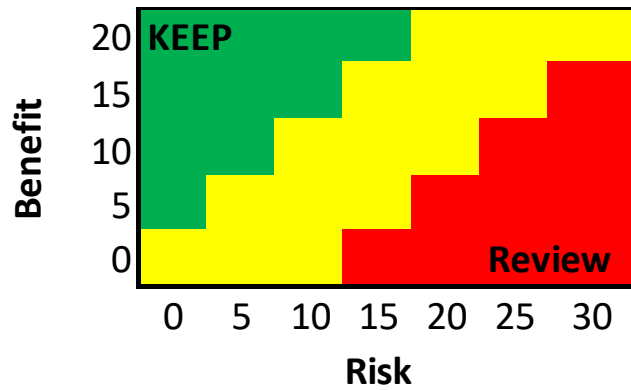


Table 3. Risk/Benefits Analysis

Road	BMP	Access Admin	Access Veg	Access Recr	Access WUI	Risk RHCA	Risk Stream	Risk Soil	Risk AOP	Risk Elk	Risk Range	Benefit	Risk	Score	Green Horse EA Findings
356	0	0	5	5	5	0	0	0	0	5	0	15	5		Likely Needed for Future Use
443	16.64	0	5	5	5	0	0	0	0	5	0	15	5		Likely Needed for Future Use
464	28.021	0	5	5	5	0	0	0	0	5	0	15	5		Likely Needed for Future Use
464A	0	0	5	5	5	0	0	0	0	0	0	15	0		Likely Needed for Future Use
2103	0	0	5	0	5	5	2	0	0	5	0	10	12		Likely Needed for Future Use
2116	0	0	5	5	5	0	0	0	0	0	0	15	0		Likely Needed for Future Use
9704	0	0	5	0	0	0	0	0	0	0	0	5	0		Likely Needed for Future Use
9708	0	0	5	0	0	0	2	0	0	0	0	5	2		Likely Needed for Future Use
9711	0	0	5	0	0	0	0	0	0	0	0	5	0		Likely Needed for Future Use
9713	0	0	5	0	0	0	0	0	0	0	0	5	0		Likely Needed for Future Use
9714	0	0	5	0	5	5	5	5	0	5	5	10	25		Likely Needed for Future Use
9714A	0	0	5	0	0	0	0	0	0	0	0	5	0		Likely Needed for Future Use
9714B	0	0	5	0	0	0	0	0	0	0	0	5	0		Likely Needed for Future Use
9714B1	0	0	5	0	0	0	0	0	0	0	0	5	0		Likely Needed for Future Use
9715	0	0	5	0	5	5	2	0	0	5	0	10	12		Likely Needed for Future Use
9715A	0	0	5	0	0	0	0	0	0	0	0	5	0		Likely Needed for Future Use
9715B	0	0	5	0	0	0	0	0	0	0	0	5	0		Likely Needed for Future Use
9716	0	0	5	0	5	0	0	0	0	5	0	10	5		Likely Needed for Future Use
9716A	0	0	5	0	0	5	5	0	0	5	0	5	15		Likely Needed for Future Use
9716B	0	0	5	0	0	5	5	5	0	5	0	5	20		Likely Needed for Future Use
9716B1	0	0	5	0	0	5	5	5	0	5	0	5	20		Likely Needed for Future Use
9716D	0	0	5	0	0	0	0	0	0	0	0	5	0		Likely Needed for Future Use
9717	0	0	5	0	5	0	0	0	0	5	0	10	5		Likely Needed for Future Use
77815	0	0	5	0	0	0	0	0	0	0	0	5	0		Likely Needed for Future Use